08L-0018

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STATE OF COLORADO

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
AIR POLLUTION CONTROL DIVISION
TELEPHONE: (303) 692-3150

Colorado Department of Public Health and Environment

CONSTRUCTION PERMIT

PERMIT NO: **12MF322-1**

INITIAL APPROVAL
Modification 1

DATE ISSUED: MAY 16, 2007

ISSUED TO: **TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC.**

THE SOURCE TO WHICH THIS PERMIT APPLIES IS DESCRIBED AND LOCATED AS FOLLOWS:

Craig electrical generating station, located at 2101 S. Ranney, Craig, Moffat County, Colorado.

THE SPECIFIC EQUIPMENT OR ACTIVITY SUBJECT TO THIS PERMIT INCLUDES THE FOLLOWING:

Unit 3, coal fired electrical generating unit, rated at 4,600 MMBtu/hour. Unit is equipped with low-NOx burners for nitrogen oxide control, a spray dryer and associated equipment for flue gas sulfur dioxide control, and a fabric filter baghouse system for particulate control.

THIS PERMIT IS GRANTED SUBJECT TO ALL RULES AND REGULATIONS OF THE COLORADO AIR QUALITY CONTROL COMMISSION AND THE COLORADO AIR POLLUTION PREVENTION AND CONTROL ACT (C.R.S. 25-7-101 et seq), TO THOSE GENERAL TERMS AND CONDITIONS SET FORTH ON THE REVERSE SIDE OF THIS DOCUMENT AND THE FOLLOWING SPECIFIC TERMS AND CONDITIONS:

1. The AIRS ID number shall be clearly marked and maintained on the subject equipment for ease of identification. (Reference: Reg. 3, Part B, IV.E.) (State only enforceable)

2. Except as provided for below, no owner or operator of a source shall allow or cause the emission into the atmosphere of any air pollutant which is in excess of 20% opacity. This standard is based on 24 consecutive opacity readings taken at 15-second intervals for six minutes. The approved reference test method for visible emissions measurement on which these standards are based is EPA Method 9 (40 CFR, Part 60, Appendix A (July, 1992)) in all subsections of Section II.A of Regulation No. 1.

   No owner or operator of a source shall allow or cause to be emitted into the atmosphere any air pollutant resulting from the building of a new fire, cleaning of fire boxes, soot blowing, start-up, any process modification, or adjustment or occasional cleaning of control equipment, which is in excess of 30% opacity for a period or periods aggregating more than six minutes in any sixty consecutive minutes.

   (Reference: Regulation No. 1, II.A.1&4)

3. Emissions of air pollutants shall not exceed the following limitations (as calculated in the Division's preliminary analysis). Compliance with the annual limits shall be determined on a rolling twelve (12) month total. By the end of each month a new twelve month total is calculated based on the previous twelve months' data. Compliance with the NOx, CO, and SO_2 emission limits shall be monitored using the CEMS required in Condition 13 of this permit. The permit holder shall calculate monthly and rolling twelve month PM_{10}, VOC, Lead, Sulfuric Acid Mist, and Fluoride emissions using actual fuel heating values and the emission factors listed in the Notes section of this permit, and shall keep a compliance record on site for Division review. (Reference: Regulation 3, Part B, III.A.4)

Particulate Matter:	443 tons/year
Particulate Matter < 10 µm [PM-10]:	403 tons/year
Nitrogen Oxides:	6,752 tons/year
Carbon Monoxide:	4,332 tons/year
Sulfur Dioxide:	2,125 tons/year
Volatile Organic Compounds:	58 tons/year
Lead:	0.054 ton/year
Sulfuric Acid Mist:	0.10 ton/year
Fluorides:	4.47 tons/year

Emissions are based on a fuel heating value of 10,358 Btu/lb.

4. Operation of this source shall comply with Best Available Control Technology (BACT) requirements for SO_2, PM_{10}., NOx, and Opacity. (Colorado Regulation No. 3, Part D, VI.1 and EPA issued PSD Permit (for SO_2 and NO_x,)) The Division and the EPA Permit have determined that the following control technologies meet the BACT requirements and that the following BACT limits apply at all times as specified below:

Particulate Matter

Filterable PM and PM_{10} Emissions

A baghouse shall be used to limit filterable PM emissions to 0.013 lb/mmBtu PM and PM_{10} emissions to 0.012 lb/mmBtu, based on the average of three test runs. The duration of each test run shall be as specified by the Division approved protocol required by Condition 14 of this permit. Compliance with the filterable PM and PM_{10} emission limits shall be monitored by conducting performance tests in accordance with the requirements in Condition 14.

Upon submittal of the application to modify the Title V Operating Permit to include this modification, the Division will consider requiring the use of a PM CEMS.

Total (Filterable and Condensable) PM and PM_{10} Emissions

Total PM and PM_{10} (filterable and condensable) emissions shall not exceed 0.022 and 0.020 lb/mmBtu, respectively, based on the average of three test runs. The duration of each test run shall be as specified by the Division-approved protocol required by Condition 14 of this permit. Compliance with the total PM and PM_{10} emissions limits shall be monitored by conducting performance tests in accordance with the requirements in Condition 14 of this permit. Based on the results of the initial performance test and the first annual compliance test, if emission rates lower than 0.022 and 0.020 lb/mmBtu (as low as 0.018 lb/mmBtu) are routinely and reliably achievable the Division will include the lower emission limits in the final approval permit, or, if no final approval permit is issued, in the Title V permit. In the event that the initial performance test indicates that annual testing is not required (i.e. emissions are less than 75% of the limit), the Division will allow the permittee an additional 12 months to conduct any additional test to verify that a lower limit is achievable.

Opacity

Except as provided for below, opacity shall not exceed 10 percent, as averaged over each separate six-minute period within an hour, beginning each hour on the hour, except for one six-minute period per hour of not more than 27 percent opacity.

During periods of startup and shutdown, opacity shall not exceed 20 percent, as averaged over each separate six-minute period within an hour, beginning each hour on the hour, except for one six-minute period per hour of not more than 27 percent opacity.

During the five-day period following the return of each and every baghouse compartment to service following bag replacement (and associated bag reattachment and retensioning), up to 20 percent opacity shall be allowed for no more than a total of 30 six-minute periods during each five-day period following such work, as averaged over each separate six-minute period within an hour, beginning each hour on the hour, except for one six-minute period per hour of not more than 27 percent opacity.

"Startup" means the setting in operation of any air pollution source for any purpose. Startup commences when the ID/FD fans are started with the intent to purge the furnace prior to returning the Unit to service. Startup ends at such time when either a third scrubber reactor is placed online or when the average scrubber inlet temperature reaches 250 degrees Fahrenheit, or when the startup is stopped for any reason and the unit drops to zero load.

"Shutdown" means the cessation of operation of any air pollution source for any purpose. The cessation of operation for this unit begins when the command signal is initiated by the unit operator to shutdown the unit and ends when fuel is no longer being fired and the fans have been shut off.

Compliance with this limit shall be determined on a continuous basis using data from the opacity monitor.

Sulfur Dioxide

0.20 lb/mmBtu heat input, as averaged over any calendar day, to be exceeded no more than once during any calendar month. This limit applies during periods of startup and shutdown. (EPA PSD Permit)

Compliance with the emission limitation is determined by calculating the arithmetic average emissions for any calendar day from the individual hourly values, for each Unit Operating Hour as defined by 40 CFR 72.2: *Unit Operating Hour* means a clock hour during which a unit combusts any fuel, either for part of the hour or for the entire hour.

80% reduction of the potential combustion concentration of SO_2, determined on a 30-day rolling average basis. This limit applies during periods of startup and shutdown. (EPA PSD Permit)

The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or device is inoperative.(60.7(b))

Compliance with the percentage reduction requirement is based on the average emission rate for 30 successive boiler operating days. A separate performance test (as defined in Subpart Da) is completed at the end of each boiler operating day, and a new 30 day percent reduction of sulfur dioxide is calculated to show compliance with the standards. (60.47Da(e))

Compliance is determined by calculating the arithmetic average of all valid hourly emission rates for SO_2 for the 30 successive boiler operating days. Compliance with the percentage reduction requirement for SO_2 is determined based on the average inlet and average outlet SO_2 emission rates for the 30 successive boiler operating days. (60.46Da(g)).

Compliance with this limit shall be monitored using the CEMS required in Condition 13 of this permit. The lb/mmBtu value will be calculated using a 5 percent CO_2 diluent cap when CO_2 measurements are less than 5 percent.

Nitrogen Oxides

0.50 lbs/mmBtu heat input, based on a rolling average of the emissions of 30 consecutive boiler-operating days. (EPA PSD Permit, revised to change the word "running" to "rolling" average)

The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or device is inoperative.(60.7(b))

Compliance with the nitrogen oxides emission limitation is based on the average emission rate for 30 successive boiler operating days. A separate performance test (as defined in Subpart Da) is completed at the end of each boiler operating day and a new 30 day average emission rate for nitrogen oxides is calculated to show compliance with the standard. (60.46Da(e))

Compliance is determined by calculating the arithmetic average of all valid hourly emission rates for NO_x for the 30 successive boiler operating days, except for data obtained during startup, shutdown, malfunction. (60.46Da(g))

Compliance with this limit shall be monitored using the CEMS required in Condition 13 of this permit.

Carbon Monoxide

Good Combustion Practices shall be used to limit CO emissions to 0.215 lb/mmBtu, based on a 30-day rolling average. This limit applies only until optimization/adjustment of operation of the low NOx burners (LNB) is achieved, and an 8-hour limit is established. Compliance with this limit shall be monitored using the CEMS required in Condition 13 of this permit.

Once optimization/adjustment of the LNB is achieved, the CEMs data shall be used to establish an 8-hour BACT limit (and a startup limit, if necessary). Such 8-hour limit shall be included in the final approval permit, or, if no final approval permit is issued, in the Title V permit. If such 8-hour (or startup) limit(s) would require revised ambient impact modeling to ensure compliance with the National Ambient Air Quality Standards, the Division will advise the permittee of such requirement, and set a schedule for submittal.

The permittee shall submit monthly progress reports for establishing the 8-hour limit beginning one month after submittal of the commencement of operation notice required in General Condition 7 of this permit. The permittee shall submit a proposed 8-hour limit within 180 days of commencement of operation, in accordance with the compliance demonstration requirements of General Condition 5 of this permit.

5. This source shall be limited to a maximum throughput as listed below and all other activities, operational rates and numbers of equipment as stated in the application. Monthly records of the actual consumption rate shall be maintained by the applicant and made available to the Division for inspection upon request. (Reference: Regulation 3, Part B,III.A.4)

   Consumption of coal shall not exceed 1,897,344 tons per year.

   Compliance with the annual throughput limits shall be determined on a rolling twelve (12) month total. By the end of each new month a new twelve month total is calculated based on the previous twelve months' data.

6. No owner or operator shall cause or permit to be emitted into the atmosphere from any fuel burning equipment, particulate matter in the flue gases which exceeds the following:

   0.1 lbs. per 10^6 BTU heat input for fuel burning equipment of greater than 500 x 10^6 BTU per hour or more. (Colorado Regulation No. 1, III.A.1.c)

7. This unit is subject to the continuous emission monitoring requirements as set forth in Colorado Regulation No. 1, Section IV. Compliance with the continuous emission monitoring system (CEMS) requirements in Condition 13 of this permit is sufficient to comply with the Regulation No. 1 CEMS requirements.

8. New sources of sulfur dioxide shall not emit or cause to be emitted sulfur dioxide in excess of the following process-specific limitations (Heat input rates shall be the manufacturer's guaranteed maximum heat input rates.)
Units with a coal heat input of 250 million BTU per hour or greater: 0.4 lbs. SO_2/million BTU coal heat input

(Colorado Regulation No. 1, VI.B.4.a(iii))

The averaging time shall be three hours, and any three-hour rolling average of emission rates which exceeds this standard is a violation of this regulation. (Colorado Regulation No. 1, VI.B.2)

9. Emissions of Lead (Pb) shall not be such that emissions result in an ambient lead concentration exceeding 1.5 micrograms per standard cubic meter averaged over a one-month period (Colorado Regulation No. 8, Part C, Section I.B – **state only** requirement).

10. The permittee may dispose of non-hazardous spent boiler tube cleaning materials in Unit 3 according to the following conditions.
    a. The air pollution control equipment shall be operating, and the steam generating unit shall be at operating temperature and engaged in electrical generation for the complete time of the disposal operation.
    b. Records of the following information shall be maintained and made available to the Division for inspection upon request: estimated total amount of solid and liquid materials destroyed; estimated start and completion dates and the estimated amount of time required for the destruction activity; a copy of any COM values exceeding the applicable standard during the disposal operation.
    c. The permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the scenario under which it is operating. (Colorado Regulation No. 3, Part A, IV.A.1, as referred to in Part C, V.C.14). This log shall be made available to the Division for inspection upon request.

11. The permittee may dispose of non-hazardous petroleum contaminated soil in Unit 3 according to the following conditions.
    a. Only non-hazardous petroleum contaminated soil shall be destroyed in the boilers.
    b. The air pollution control equipment shall be operating, and the steam generating unit shall be at operating temperature and engaged in electrical generation for the complete time of the disposal operation.
    c. Records of the following information shall be maintained and made available to the Division for inspection upon request: the estimated amount of non-hazardous petroleum contaminated soil destroyed; a description of the type of petroleum contaminant destroyed, and a statement that the contaminant was non-hazardous; the estimated start and completion dates and the estimated amount of time required for the destruction activity; a copy of any COM values exceeding the applicable standard during the disposal operation.
    d. The permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the scenario under which it is operating. (Colorado Regulation No. 3, Part A, IV.A.1, as referred to in Part C, V.C.14). This log shall be made available to the Division for inspection upon request.

12. This source is subject to the New Source Performance Standards requirements of Regulation No. 6, including, but not limited to:

Part A – Federal Register Regulations Adopted by Reference.

a. Subpart Da – Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced After September 18, 1978, specifically,

(i) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility for which construction, reconstruction, or modification is commenced after February 28, 2005:

(A) Any gases which contain particulate matter in excess of 0.014 lb/MWh gross energy output; or 0.015 lb/million Btu heat input . (60.42Da(c)(1&2))
As an alternative to meeting the requirements of 60.42Da(c)(1) or (2), the owner or operator may elect to meet the requirements of 60.42Da(d).
These limits apply at all times except during periods of startup, shutdown, or malfunction. (60.48Da(c))

(B) Any gases which exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. (60.42Da(b))

(ii) For an affected facility for which construction, reconstruction or modification commenced before or on February 28, 2005: Any gases which contain sulfur dioxide in excess of : 1.20 lb/million Btu heat input and 10 percent of the potential combustion concentration (90 percent reduction), or 30 percent of the potential combustion concentration (70 percent reduction), when emissions are less than 0.60 lb/million Btu heat input. (60.43Da(a)) Compliance with the emission limitation and percent reduction requirements are both determined on a 30-day rolling average basis. (60.43Da(g))

This standard applies at all times except when emergency conditions exist (as defined in Subpart Da) and the procedures under paragraph (d) of 60.48Da are implemented.

(iii) No owner or operator shall cause to be discharged into the atmosphere from any affected facility, any gases which contain nitrogen oxides (expressed as NO_2) in excess of the following emission limit, based on a 30-day rolling average: 0.50 lb/million Btu heat input. (60.44Da(a))
This standard applies at all times except during periods of startup, shutdown, or malfunction. (60.48Da(c))

(iv) The owner or operator of an affected facility subject to this subpart shall demonstrate compliance as set forth in 60.48Da(g), (n) and (o), including, but not limited to the requirements for annual performance testing and bag leak detection.

(v) The owner or operator shall install, calibrate, maintain, and operate continuous monitoring systems as set forth in 60.49Da.

(vi) Compliance determination methods in 60.50Da.

(vii) Reporting requirements in 60.51Da.

(viii) Recordkeeping requirements in 60.52Da.

Part B – Specific Facilities and Sources, Non-Federal NSPS

b. No owner or operator subject to the provisions of this regulation may discharge, or cause the discharge into the atmosphere of any particulate matter which is:

Greater than 20% opacity.

(Colorado Regulation No. 6, Part B, II.C.3 – This is a **State-Only** requirement)

This opacity standard applies at all times except during periods of startup, shutdown, or malfunction.

c. No owner or operator subject to the provisions of this regulation may discharge, or cause the discharge into the atmosphere sulfur dioxide in excess of:

Sources with a coal heat input of 250 million Btu per hour or greater: 0.4 lbs. SO_2/million Btu coal heat input.

(Colorado Regulation No. 6, Part B, II.D.1.c – This is a **State-Only** requirement)

In addition, the following requirements of Regulation No. 6, Part A, Subpart A: General Provisions, apply:

a. At all times, including periods of startup, shutdown, and malfunction, owners or operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions. Determination of whether acceptable operating procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. (60.11(d))

b. No article, machine, equipment or process shall be used to conceal an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. (60.12)

c. Written notification of construction and initial startup dates shall be submitted to the Division as required under 60.7.

d. Records of startups, shutdowns, and malfunctions shall be maintained, as required under 60.7(b)

13. Note that EPA has promulgated revisions to the Mercury (Hg) emission limitations in NSPS Da (published in the June 9, 2006 Federal Register). Therefore, the Hg limitations and monitoring requirements identified below apply. As of the issue date of this permit, the Division has not adopted these revisions into Colorado Regulation No. 6, Part A, therefore, the Mercury emission limitations, monitoring and reporting requirements are **Federal-Only enforceable.**

Mercury Emissions

On and after the date on which the initial performance test required under § 60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility for which construction, modification, or reconstruction commenced after January 30, 2004, any gases which contain mercury (Hg) emissions in excess of each Hg emissions limit in paragraphs (a)(1) through (5) of § 60.45Da that applies to you. The Hg emissions limits in paragraphs (a)(1) through (5) of § 60.45Da are based on a 12-month rolling average using the procedures in § 60.50Da(h).

For each coal-fired electric utility steam generating unit that burns only subbituminous coal (§ 60.45Da(2)):
(i) If your unit is located in a county-level geographical area receiving greater than 25 inches per year (in/yr) mean annual precipitation, based on the most recent publicly available U.S. Department of Agriculture 30-year data, you must not discharge into the atmosphere any gases from a new affected source which contain Hg in excess of 66×10^{-6} lb/MWh or 0.066 lb/GWh on an output basis. The SI equivalent is 0.0083 ng/J.
(ii) If your unit is located in a county-level geographical area receiving less than or equal to 25 in/yr mean annual precipitation, based on the most recent publicly available U.S. Department of Agriculture 30-year data, you must

not discharge into the atmosphere any gases from a new affected source which contain Hg in excess of 97 × 10^{-6} lb/MWh or 0.097 lb/GWh on an output basis. The SI equivalent is 0.0122 ng/J.

Compliance provisions in § 60.48Da(l) for Hg emissions

Monitoring requirements for Hg in § 60.49Da, specifically, install and operate a continuous emission monitoring system for Hg (§ 60.49Da(p)), or as an alternative monitor Hg emissions with a sorbent trap monitoring system (§ 60.49Da(q)), correcting emissions for stack gas moisture content (§ 60.49Da(r)), prepare and submit a unit specific monitoring plan (§ 60.49Da(s)).

Compliance determination methods for Hg in § 60.50Da

Reporting requirements for Hg in § 60.51Da

Recordkeeping requirements for Hg emission limitations in § 60.52Da

14. For this unit, the source shall install, certify and operate continuous emission monitoring (CEM) equipment for measuring opacity, SO_2, NO_X (including diluent gas: either CO_2 or O_2), CO, and volumetric flow (40 CFR Part 60 as adopted by reference in Colorado Regulation No. 6, Part A, and Part 75 as adopted by reference in Colorado Regulation No. 18 and Colorado Regulation No. 1, Section IV.B.1, 2 and 3). In addition, the permittee shall install, certify, and operate a CEM for the scrubber inlet SO_2 concentration and CO_2, as required in 40 CFR, Part 60, Subpart Da. Alternatively, "as-fired" fuel sampling and analysis meeting the requirements of Method 19 (40 CFR Part 60, Appendix A) may be used to determine potential SO_2 emissions for the scrubber inlet, as set forth in 60.47a(b)(3).

15. In addition to the performance tests required by Condition 12 of this permit, initial performance testing for filterable and condensable PM and PM_{10}, HF, H_2SO shall be performed to demonstrate compliance with the emission limits set forth in Conditions 3 and 4 of this permit.

Thereafter, performance testing for filterable and condensable PM and PM_{10} shall be performed annually. (Colorado Regulation No. 3, Part B, III.G.3)

Tests shall be performed in accordance with the requirements and procedures set forth in the appropriate EPA Test Methods as set forth in 40 CFR Part 60, Appendix A. Other established test methods or refinements or adaptations to EPA Test Methods may be used for testing, if approved by the Division in advance. Such revisions, refinements or alternative methods must also be approved by the EPA if the revision, refinement or alternative method will be used to demonstrate compliance with any of the limitations in Condition 12 of this permit.

A stack testing protocol shall be submitted for Division approval at least thirty (30) calendar days prior to any performance of a test required under this condition. No stack test required herein shall be performed without prior written approval by the Division. The Division reserves the right to witness the test. In order to facilitate the Division's ability to make plans to witness the test, notice of the date(s) for the stack test shall be submitted to the Division at least thirty (30) calendar days prior to the test. The Division may for good cause shown, waive this thirty (30) day notice requirement. In instances when a scheduling conflict is presented, the Division shall immediately contact the permittee in order to explore the possibility of making modification to the stack test schedule. The required number of copies of the compliance test results shall be submitted to the Division within forty-five (45) calendar days of the completion of the test unless a longer period is approved by the Division.

Any stack test conducted to show compliance with an annual emission limitation shall have the results projected up to the annual averaging time by multiplying the test results by 8,760 hours.

16. A revised Air Pollutant Emission Notice (APEN) shall be filed: (Reference: Reg.3, Part A,II.C)

a. Annually whenever a significant increase in emissions occurs as follows:

For any criteria pollutant:

For sources emitting **100 tons per year or more**, a change in actual emissions of five percent or 50 tons per year or more, whichever is less, above the level reported on the last APEN submitted; or

For any non-criteria reportable pollutant:

If the emissions increase by 50% or five (5) tons per year, whichever is less, above the level reported on the last APEN submitted to the Division.

b. Whenever there is a change in the owner or operator of any facility, process, or activity; or

c. Whenever new control equipment is installed, or whenever a different type of control equipment replaces an existing type of control equipment; or

d. Whenever a permit limitation must be modified; or

e. No later than 30 days before the existing APEN expires.

Civil penalties for noncompliance wit this Condition 16 shall be determined pursuant to CRS 25-7-122.

17. Within one hundred and eighty days (180) after commencement of operation, the source shall demonstrate to the Division compliance with the terms and conditions of this initial approval construction permit. It is the permittee's responsibility to self-certify compliance with the conditions. Failure to demonstrate compliance within 180 days may result in revocation of the permit. (Information on how to certify compliance was mailed with the permit or can be obtained from the Division at 303-692-3209.) (Reference: Reg. 3, Part B, III.G.2)

18. Prior to final approval being issued, the applicant shall submit to the Division for approval an operating and maintenance plan for all control equipment and control practices, and a proposed record keeping format that will outline how the applicant will maintain compliance on an ongoing basis with the requirements of this permit. (Reference: Reg. 3, Part B, III.G.7)

By: James A. Kirz (for)
Cathy Rhodes
Permit Engineer

By: Roland C. Hea
Roland C. Hea, P.E.
Permitting Section Supervisor
Stationary Sources Program
Air Pollution Control Division

Initial Approval: July 26, 1985 to Colorado-Ute Electric Association
Final Approval: June 29, 1993
This modification: Upgrade of Unit 3 turbine to increase generating capacity from Unit 3 by approximately 30 MW, including addition of Low-NOx burners.

Notes to Permit Holder:

1) The production or raw material processing limits and emission limits contained in this permit are based on the production/processing rates requested in the permit application. These limits may be revised upon request of the permittee providing there is no exceedance of any specific emission control regulation or any ambient air quality standard. A revised air pollution emission notice (APEN) and application form must be submitted with a request for a permit revision.

2) This source may be able to utilize the Affirmative Defense Provisions set forth in the Common Provisions Section II.E. (excess emissions during malfunctions) and/or Section II.J. (excess emissions during startup and shutdown).

3) The emission levels contained in this permit are based on the following emission factors:

Pollutant	Emission Factor pound per process unit	Process Unit	Remarks
Oxides of Nitrogen	CEMS		Low-NOx Burners
Carbon Monoxide	0.215	BTUE6	
Sulfur Dioxide	CEMS		Spray Dryer
Particulate Matter (PM)	Filterable PM: 0.013 Total PM: 0.022	BTUE6	
PM-10 (PM less than 10 µm)	Filterable PM_{10}: 0.012 Total PM_{10}: 0.020	BTUE6	
Volatile Organic Compounds	0.003	BTUE6	AP-42 10,335 BTU/ton
Lead	2.82	BTUE12	EPRI
HF	232.74	BTUE12	
H_2SO_4			

4) This source is classified as a: Major modification
At a: Major Stationary Source

5) This source is subject to the provisions of Regulation Number 3, Part C, Operating permits (Title V of the 1990 Federal Clean Air Act Amendments). The current Title V permit application shall be modified to include these emission units. In the event that a Title V operating permit is issued prior to startup of these units, the permittee shall apply for a modification to that permit within twelve (12) months of startup.

6) The following emissions of non-criteria air pollutants are estimated based upon the material consumptions as indicated in Condition No. 4. This information is listed to inform the operator of the Division's analysis of the specific compounds. This information is listed on the Division's emission inventory system.

C.A.S.#	SUBSTANCE	EMISSIONS [LB/YR]
7782-50-5	Chlorine	2,092
NONE	Cyanide	4,648
7439-92-1	Lead	109
7782414	Fluorine	8,945
7664393	Hydrogen Fluoride	8,945
NONE	Manganese Compounds	332
74839	Methyl Bromide	298
74873	Methyl Chloride	985
60-34-4	Methyl Hydrazine	316
7647-01-0	Hydrogen Chloride	2089

GENERAL TERMS AND CONDITIONS: (IMPORTANT! READ ITEMS 5,6,7 AND 8)

1. This permit is issued in reliance upon the accuracy and completeness of information supplied by the applicant and is conditioned upon conduct of the activity, or construction, installation and operation of the source, in accordance with this information and with representations made by the applicant or applicant's agents. It is valid only for the equipment and operations or activity specifically identified on the permit.

2. Unless specifically stated otherwise, the general and specific conditions contained in this permit have been determined by the APCD to be necessary to assure compliance with the provisions of Section 25-7-114.5(7)(a), C.R.S.

3. Each and every condition of this permit is a material part hereof and is not severable. Any challenge to or appeal of, a condition hereof shall constitute a rejection of the entire permit and upon such occurrence, this permit shall be deemed denied *ab initio*. This permit may be revoked at any time prior to final approval by the Air Pollution Control Division (APCD) on grounds set forth in the Colorado Air Quality Control Act and regulations of the Air Quality Control Commission (AQCC), including failure to meet any express term or condition of the permit. If the Division denies a permit, conditions imposed upon a permit are contested by the applicant, or the Division revokes a permit, the applicant or owner or operator of a source may request a hearing before the AQCC for review of the Division's action.

4. This permit and any required attachments must be retained and made available for inspection upon request at the location set forth herein. With respect to a portable source which is moved to a new location, a copy of the Relocation Notice (required by law to be submitted to the APCD whenever a portable source is relocated) should be attached to this permit. The permit may be reissued to a new owner by the APCD as provided in AQCC Regulation No. 3, Part B, Section III. B. upon a request for transfer of ownership and the submittal of a revised APEN and the required fee.

5. Issuance (initial approval) of an emission permit does not provide "final" authority for this activity or operation of this source. Final approval of the permit must be secured from the APCD in writing in accordance with the provisions of 25-7-114.5 C.R.S. and AQCC Regulation No. 3, Part B, Section IV. H. Final approval cannot be granted until the operation or activity commences and has been verified by the APCD as conforming in all respects with the conditions of the permit. If the APCD so determines, it will provide written documentation of such final approval, which does constitute "final" authority to operate. ***Compliance with the permit conditions must be demonstrated within 180 days of commencement of operation.***

6. **THIS PERMIT AUTOMATICALLY EXPIRES IF** you (1) do not commence construction or operation within 18 months after either the date of issuance of this permit or the date on which such construction or activity was scheduled to commence as set forth in the permit, whichever is later; (2) discontinue construction for a period of 18 months or more; or (3) do not complete construction within a reasonable time of the estimated completion date. Extensions of the expiration date may be granted by the APCD upon a showing of good cause by the permittee.

7. **YOU MUST notify the APCD at least thirty days (fifteen days for portable sources) prior to commencement of the permitted operation or activity.** Failure to do so is a violation of Section 25-7-114.5(12)(a), C.R.S. and AQCC Regulation No. 3, Part B, Section IV. H. 1., and can result in the revocation of the permit. *You must demonstrate compliance with the permit conditions within 180 days after commencement of operation as stated in general condition number 5 above.*

8. Section 25-7-114.7(2), C.R.S. requires that all sources required to file an Air Pollution Emission Notice (APEN) must **pay an annual fee** to cover the costs of inspections and administration. If a source or activity is to be discontinued, the owner must notify the Division in writing requesting a cancellation of the permit. Upon notification, annual fee billing will terminate.

9. Violation of the terms of a permit or of the provisions of the Colorado Air Quality Control Act or the regulations of the AQCC may result in administrative, civil or criminal enforcement actions under Sections 25-7-115 (enforcement), -121 (injunctions), -122 (civil penalties), -122.1 (criminal penalties), C.R.S.